Dairy Situation

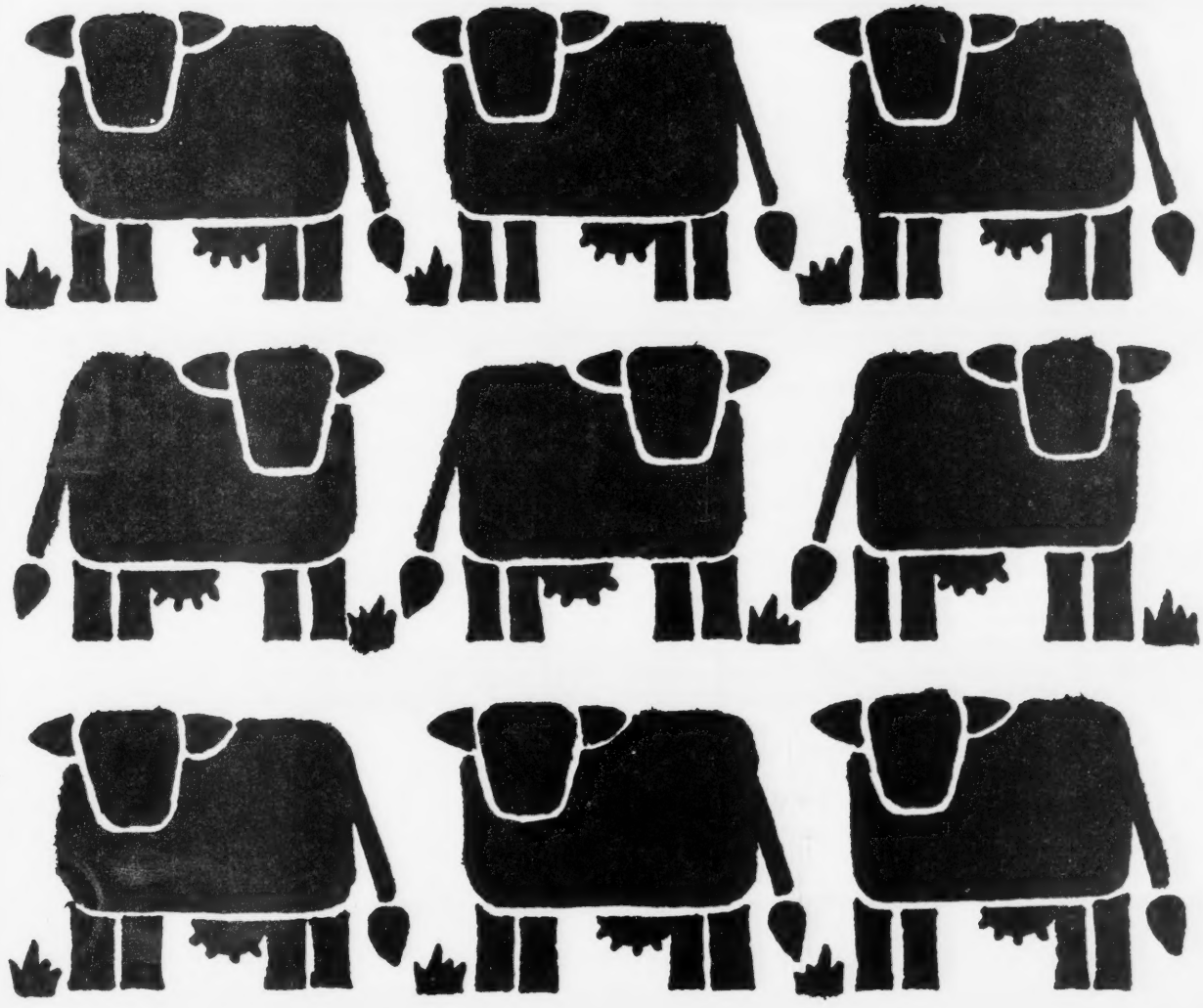
Economics, Statistics, and Cooperatives Service

DS-376

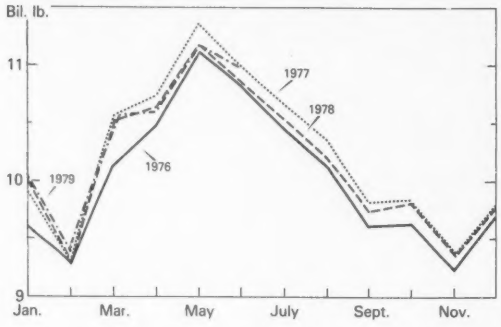
U.S. Department of Agriculture

JULY 1979

Approved by the World Food and Agricultural Outlook and Situation Board



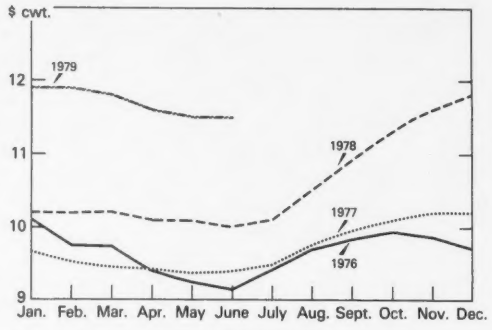
U.S. Milk Production by Months



USDA Neg. ESCS 5498-79(7)

Figure 1

Milk Prices*

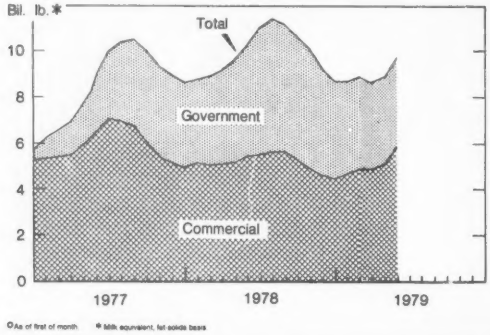


*U.S. average price received by farmers for deliveries to plants and dealers.

USDA Neg. ESCS 5449-79(7)

Figure 2

Dairy Product Stocks○



○As of first of month. *Milk equivalent, fat-solids basis.

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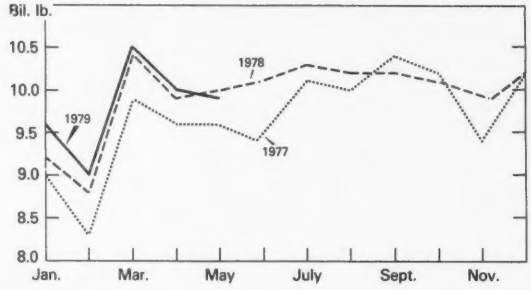
Figure 3

Commercial Disappearance of Milk in All Products*



*Milk equivalent.

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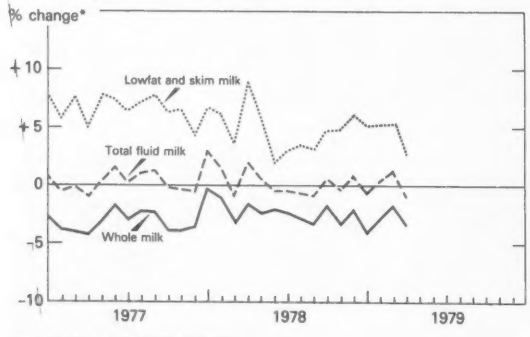
Figure 4

Daily Average Sales of Fluid Milk Items

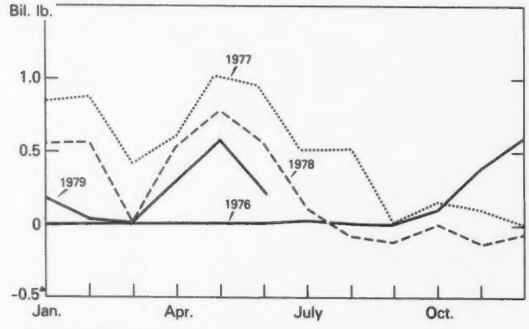


*From year earlier, adjusted for calender composition.

USDA Neg. ESCS 2705-79(7)

Figure 5

USDA Dairy Product Purchases*



*Net removals, milk equivalent, fat-solids basis.
△Negative figures denote domestic sales exceeded purchases.

USDA Neg. ESCS 8449-79(7)

Figure 6

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Approved by the World Food and Agriculture Outlook and Situation Board.

SUMMARY

After a light seasonal surplus during the flush milk production period, wholesale dairy product prices had firmed by mid-July—although price increases were limited. During the rest of 1979, wholesale dairy prices (followed by farm milk prices and retail dairy prices) probably will post substantial seasonal rises. The magnitude of second-half increases will depend on the level of milk output, the degree to which demand is dampened by deterioration in the economy, the impact of the rebuilt commercial dairy stocks, and the support purchase and sell-back prices for the new marketing year. It now appears more likely that price rises during the rest of 1979 will not quite match those of 1978.

Milk production during the rest of the year is expected to remain close to year-earlier levels. Meanwhile, weakening consumer incomes and a general economic slowing probably will forestall trend increases in commercial use. Although not out of line with expected needs, commercial dairy stocks are greater than a year ago and will help moderate upward price pressure.

Milk production in May-June was slightly larger than a year earlier. The continued smallness of year-to-year gains in output per cow suggests that dairymen (as in 1978) have been conservative about increasing concentrate feeding. Milk cow numbers in May-June continued to run almost 1 percent below a year earlier.

The *Dairy Situation* is published in March, May, July, October, and December.

With milk prices well above a year earlier, milk-feed price relationships probably will be fairly favorable during the rest of 1979—although the picture for feed prices is more uncertain than during the past 2 years. In addition, dairymen may be becoming a little more liberal in increasing concentrate feeding. However, increases in nonfeed costs have accelerated and cull cow prices will remain well above a year earlier. Annual 1979 milk output is expected to be within 1 percent of 1978's 122 billion pounds.

Brisk competition for manufacturing grade milk kept prices a little above the support price through the flush season—even though wholesale dairy product prices (except for block cheese) were near support purchase prices. For all milk in June, farmers received an average $11.50 per 100 pounds, up 15 percent from a year earlier.

The higher milk prices probably have kept net income to dairy enterprises slightly better than a year ago. Dairy income likely will remain relatively favorable unless feed prices move up sharply.

Retail dairy prices continued to rise in April-May, although the pace had slowed from last fall and winter. During the second half of 1979, seasonal rises in retail dairy prices will be substantial but probably will not exceed the 6-percent rise of a year ago.

Supplies of milk available for manufacturing were very close to a year earlier in May, as was production of butter, American cheese, and nonfat dry milk. Since then, more milk may have been available for manufacturing. In coming months, American cheese production probably will draw milk away from butter-powder operations.

By April-May, the earlier strong gains in total commercial use had dissipated. Although commercial use of American cheese is expected to resume year-to-year increases, generally weak demand conditions (combined with higher retail prices) probably will keep such gains small, may trim increases in sales of other varieties, and likely will weaken commercial use of butter.

On June 1, commercial stocks of milkfat were 6 percent larger than the low 1978 levels, while holdings of milk solids-not-fat were 16 percent greater. Commercial stocks of cheese and nonfat dry milk were larger but industry holdings of butter were lower.

Light seasonal purchases were made under the price support program during April-June. For the first half of 1979, USDA purchases were less than half those of a year earlier and just over a fourth of the large 1977 removals.

Imports of both cheese and other dairy products in April-May were above a year earlier. Commercial exports were smaller but food-aid exports were larger.

Forage conditions caused a temporary dip in spring milk production in the European Community. Intervention stocks of butter have risen sharply but intervention stocks of nonfat dry milk have been pulled down substantially. Milk output in New Zealand responded to the improved pasture conditions toward the end of their season.

DAIRY SITUATION

SITUATION AND OUTLOOK

PRODUCTION

Milk Output Near 1978

Milk production during the first half of 1979 totaled 62.7 billion pounds, just barely above a year earlier. Output in June was up about 1 percent from a year earlier, leaving second quarter output about the same as last year. Thus, there still is no clear evidence of either an expansion or contraction in production.

U.S. milk production

Month	1978	1979	Change
	Million pounds		*Percent*
January	9,994	10,035	+0.4
February	9,287	9,379	+1.0
March	10,523	10,555	+.3
April	10,631	10,609	-.2
May	11,178	11,175	0
June	10,851	10,982	+1.2
July	10,534		
August	10,213		
September	9,733		
October	9,832		
November	9,364		
December	9,788		
Total	121,928		

Milk cow numbers this spring continued to decline but were less than 1 percent below a year ago. Higher cull cow prices, combined with even sharper rises in milk cow replacement prices, have resulted in a repetition of the substantial January-June decline of 1978. Utility cow prices in Omaha during the second quarter averaged 43 percent higher than last year. By mid-July, Utility cow prices were quoted at about $49 per 100 pounds—down $11 from the seasonal peak. Meanwhile, dairy replacement prices have increased each month for the last 22 months and during the second quarter were up nearly two-thirds from a year earlier.

While gains in milk output per cow were small this spring, the slight gains were enough to outweigh the decline in cow numbers. The slow spring this year was similar to 1978 so differences due to weather factors were minimal.

Restraint in concentrate feeding may have played a part in the slow gains in output per cow. Last year's very conservative (2 percent) increase in grain feeding per cow may indicate that favorable milk-feed price relationships do not result in as large an increase as in earlier years. Even so, there is evidence that dairymen may be becoming a little bit more liberal with feeding rates. Dairymen reported feeding almost 7 percent more grain and other concentrates on July 1 than a year earlier, twice the year-to-year boost reported a year ago.

Changes in milk output from a year earlier were varied this spring. In May-June, only about a half of the 33 States that report monthly milk output showed production as large or larger than a year earlier. However, this group contained all of the 5 major dairy States except Minnesota. Regionally, milk output was significantly higher in the Pacific, Northeast, and Moutain regions, significantly lower in the Northern Plains and Delta, and close to a year earlier elsewhere.

Little Change in Production Expected

Generally favorable price and income conditions are expected to offset higher production costs and hold milk output near a year earlier during the second half of the year. However, uncertainty about feed costs and other production costs, rate of decline in cow numbers, and strength in output per cow indicate that milk output in 1979 could range from a decline of 1 percent to an increase of 1 percent from the 1978 level.

Farm milk prices will remain well above a year earlier, although increases during the second half may be slightly smaller than the 15-percent average rise during the first half of 1979. While feed prices during the rest of the year will be higher than a year earlier, milk-feed price relationships probably will continue favorable—leading to further increases in concentrate feeding and some growth in output per cow.

However, increases in output per cow will be largely offset by a continued decline in milk cow numbers. Prices of slaughter cows and dairy replacements have been high and probably will remain high during the rest of the year. To the

extent that the substantial January-June decline represented earlier-than-normal culling, month-to-month declines probably will flatten in coming months. Temporary increases (similar to 1978) are again possible.

Utility cow prices, Omaha

Month	1977	1978	1979
	Dollars per cwt.		
January	22.95	27.59	47.33
February	23.88	29.45	50.81
March	26.67	32.44	52.94
April	27.63	36.94	57.00
May	26.57	39.21	55.51
June	25.64	37.61	50.60
July	25.23	38.09	
August	25.38	37.85	
September	26.12	39.75	
October	24.89	40.46	
November	23.80	39.30	
December	25.02	41.85	
Average	25.32	36.71	36.71

Feed Prices Rising

Feed prices have been significantly higher than a year earlier and increasing. In June, farmers paid an average $152 per ton for 16-percent dairy ration, up about $12 from a year earlier. However, feed ingredient prices have increased even more rapidly than have prices of commercially mixed feed. In mid-July, corn prices at Chicago were about $3.00-$3.05 (No. 2 yellow), up about 70 cents from a year ago. Soybean meal at Decatur (44 percent) was about $200-$205 per ton, up about $30.

On the roughage side, alfalfa hay prices in June were $63 per ton, up $9 from a year ago. Early summer pastures in most of the important dairy areas were better than normal but not quite as good as a year ago. At a July 1 rating of 86 nationwide, pastures were good to excellent.

Early season prospects are for large feed crops again in 1979. Based on conditions as of July 1, the corn crop is forecast at 6.66 billion bushels, down 6 percent from last year's record but still large. While planted late, the crop was quickly planted once the weather cleared and it is in generally good condition. However, yields are not expected to reach last year's record. Acreage planted to soybeans is up 12 percent from last year. Even with these large crops, strong foreign and domestic demand is expected to result in feed prices above year-earlier levels.

Even with the higher feed prices, milk prices well above a year ago have resulted in still favorable milk-feed price relationships. In June, the milk-feed price ratio (now based on the price of 16-percent dairy ration) stood at 1.51, up from 1.43 a year earlier and the seventh straight monthly record (figure 7). With milk prices rising, milk-feed price relationships probably will stay favorable during the rest of 1979—although the expected higher feed prices may quickly bring an end to the record-high relationships of recent months. This is particularly likely if crops here and abroad are reduced by bad weather or if foreign demand for U.S. grains strengthens further.

PRICES AND INCOME

Farm Milk Prices To Rise

If milk production and commercial use hold near a year earlier as expected, average farm milk prices will move well above the support price this summer. Seasonal tightening of supply-demand conditions probably will generate considerable upward pressure on milk prices.

However, two factors will help to moderate price rises. This year's larger commercial stocks will help to slow seasonal price increases. In addition, the availability of butter and nonfat dry milk from Commodity Credit Corporation (CCC) stocks at 105 percent of the current purchase prices will forestall large increases in the Midwest and East and will hold milk prices on the West Coast to levels just slightly above the support price.

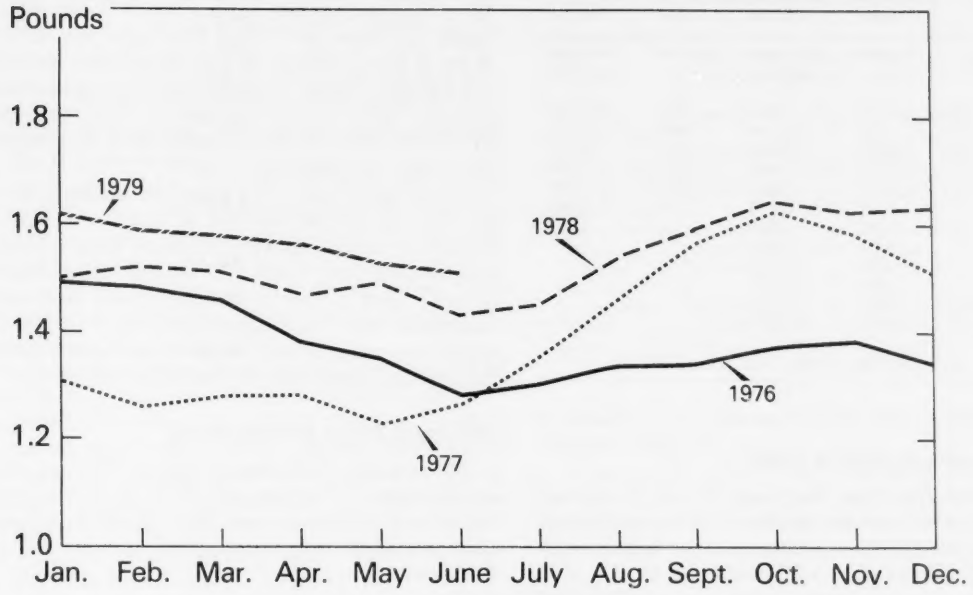
This fall, the support price and sell-back prices effective October 1 could have a major bearing on farm milk prices. A support level of 75 percent of parity on October 1 (the legal minimum unless new legislation is enacted) would result in, at most, a slight increase in the support price, while an 80-percent support level would generate another large increase. There is a fair likelihood that a 105-percent sell-back policy (assuming a support price of 80 percent of parity) would diminish price increases arising from expected market conditions.

Milk-feed price ratio[1]

Month	1977	1978	1979
	Pounds		
January	1.31	1.50	1.61
February	1.26	1.52	1.59
March	1.28	1.51	1.58
April	1.28	1.47	1.56
May	1.23	1.49	1.53
June	1.26	1.43	1.51
July	1.35	1.45	
August	1.46	1.54	
September	1.56	1.59	
October	1.62	1.64	
November	1.58	1.62	
December	1.51	1.63	
Average	1.39	1.53	

[1] Pounds of 16% protein ration equal in value to 1 pound of milk.

Milk-Feed Price Ratio*



*Pounds of 16% protein ration equal in value to one pound of milk sold to plants and dealers.

USDA

Figure 7

Neg. ESCS 40-79 (7)

Manufacturing grade milk prices were somewhat buoyant this spring. The Minnesota-Wisconsin (M-W) price rose counterseasonally from $10.63 to $10.76 per 100 pounds (3.5 percent milkfat) during April-June, 12 to 25 cents above the support price. (The M-W price most accurately reflects competitive conditions for manufacturing grade milk and typically runs 8 to 10 cents higher than the national average.) With wholesale prices near support purchase prices, the M-W prices reflected fairly brisk competition among manufacturing plants, especially since virtually no spot shipments of Grade A milk were made from this area. The U.S. average price of manufacturing grade milk was $10.70 in June, about a dime above the support price when adjusted for fat content.

Farmers received an average of $11.50 per 100 pounds of all milk in June, up 15 percent from a year earlier. Year-to-year increases in milk prices have slowed slightly since early winter.

Minimum Class I prices in Federal order markets will average $12.86 per 100 pounds in August, up $1.50 from a year ago. By August, minimum Class I prices will have stayed within 15 cents of the February level for 6 straight months.

The level of Class I prices negotiated by cooperatives also has been stable in recent months. During February-July, the estimated average over-order payment ranged from 40 to 47 cents per 100 pounds, with an average of 42 cents for July. Increasing transportation charges resulting from higher fuel costs could lead to higher over-order payments in coming months.

Milk prices received by farmers

Month	All sold to plants			Manufacturing grade		
	1977	1978	1979	1977	1978	1979
	Dollars per 100 pounds					
January. . .	9.65	10.20	11.90	8.48	9.17	10.90
February . .	9.53	10.20	11.90	8.41	9.21	10.80
March. . . .	9.45	10.20	11.80	8.46	9.27	10,80
April	9.44	10.10	11.60	8.66	9.30	10.70
May.	9.37	10.10	11.50	8.62	9.26	10.80
June	9.40	10.00	11.50	8.56	9.24	10.70
July.	9.49	10.10		8.56	9.28	
August . . .	9.66	10.50		8.64	9.62	
September .	9.97	10.90		8.84	9.96	
October . .	10.10	11.30		9.02	10.50	
November .	10.20	11.60		9.11	10.80	
December .	10.20	11.80		9.19	10.90	
Average .	9.72	10.58		8.71	9.71	

Wisconsin out-of-state milk shipments

Month	1978		1979	
	Loads	Volume	Loads	Volume
	Number	*Thousand pounds*	*Number*	*Thousand pounds*
January	206	9,682	302	14,194
February	314	14,758	180	8,460
March	239	11,233	64	3,008
April	183	8,601	17	799
May	154	7,238	24	1,128
June	57	2,679	6	282
July	121	5,687		
August	119	5,593		
September	475	22,325		
October	191	8,977		
November	276	12,972		
December	320	15,040		
Total	2,655	124,785		

Cash Receipts Post Large Gains

Cash receipts from dairying during the second quarter were 15 percent higher than a year earlier. Virtually all of the rise was due to higher milk prices. Cash receipts will continue to run well above a year ago during the rest of 1979 and probably will total more than $14½ billion for the year.

Even though year-to-year increases in feeder livestock prices have eased, the index of prices paid for production items was about 14 percent higher than a year earlier during April-June, about the same increase as in the first quarter. Increases from a year earlier in prices of feed and other production items accelerated during the second quarter. Even so, net incomes to dairy enterprises probably were slightly better than the relatively favorable conditions of 1978.

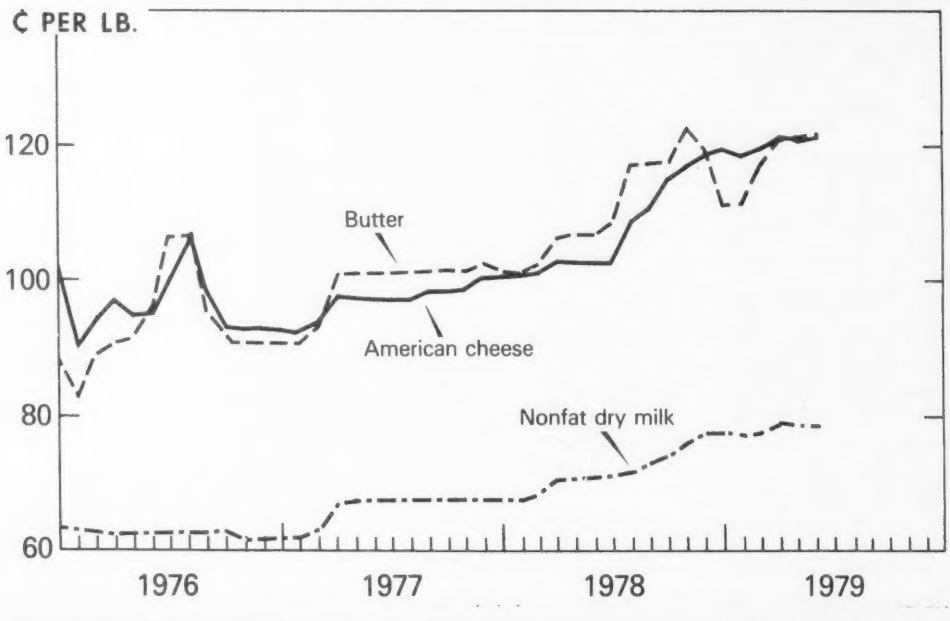
Later this year, the expected strength in milk prices will bolster returns to dairymen. However, whether or not these increases keep pace with production cost rises will largely depend on feed prices. Feed prices potentially could rise enough, combined with the limiting effects of USDA dairy stocks on milk prices, to result in deterioration of net income conditions for the dairy enterprise.

Wholesale Prices Strengthening

By mid-July, wholesale dairy product prices had shown signs of firming but only small butter price increases had been recorded. Rises in wholesale cheese and butter prices are imminent and some increases in nonfat dry milk prices probably will follow.

Prices of American cheese in 40-pound blocks ran just slightly over the support purchase price

Wholesale Dairy Product Prices



USDA

Figure 8

Neg. ESCS 39-79(7)

through the flush milk production season (figure 8). Meanwhile, barrel cheese prices flirted with the support purchase price but were never solidly on support. By mid-July, barrel cheese prices had returned to the level of mid-April while block American cheese prices were a penny higher. The differential of 6 cents per pound between the two styles was slightly wider than normal, reflecting the relatively stronger demand for natural cheese than for process cheese.

Butter prices had risen 2 to 3 cents per pound but nonfat dry milk prices remained near the support purchase price in mid-July. Butter and especially powder prices probably will be quite sensitive to the amount of milk drawn away from butter-powder production by American cheese operations during the rest of 1979.

Whey product prices have stayed low because of heavy production and sluggish demand. By mid-July, edible dry whey was quoted at about 10 cents per pound (nonhygroscopic, Central States area), down about 4 cents from a year earlier. Whey product prices may edge higher as output drops seasonally but large rises are not likely.

The casein market remains tight with almost no trading. The New Zealand list price was raised 11 cents to 91 cents per pound in July.

Evaporated milk prices were quoted at about $17.85 per case in mid-July, up about a tenth from a year earlier. Wholesale ice cream prices in June were 11 percent higher than a year earlier.

The June wholesale price index for dairy products, as reported by the Bureau of Labor Statistics (BLS), was 208.3 (1967=100), up 12 percent from a year earlier but only 3 percent since last December. Increases during the second half of 1979 will substantially exceed those of the first half.

Retail Price Rises To Accelerate

Retail prices of milk and dairy products continued to rise this spring, but the pace was slower than during last winter or a year earlier. Most of the increase since the start of 1979 was due to wider farm-retail price spreads; the farm value of dairy products was just slightly higher than early winter. Farm-retail price spreads typically expand considerably more during the first half of the year than during the second half.

During the second half of 1979, prices of milk and dairy products at the supermarket will rise substantially from current levels. However, the seasonal rise probably will not exceed the 6-percent rise of last year. For all of 1979, retail dairy prices probably will average 10 to 13 percent above a year ago.

Sharply higher energy costs will widen the farm-retail spread during the rest of 1979. Both processing and transportation costs quickly will be affected directly.

Retail dairy product prices

Item	Index base	May 1977	May 1978	Nov. 1978	May 1979
Consumer Price Index[1]	1967=100	180.6	193.3	202.0	214.1
All food [1]	1967=100	191.7	210.3	217.8	234.3
All dairy products[1]	1967=100	173.1	183.5	193.2	203.8
Fluid milk and cream	12/77=100	---	103.7	108.9	114.7
Whole milk	1967=100	161.5	170.1	178.4	188.1
Other	12/77=100	---	103.2	108.5	114.3
Manufactured dairy products	12/77=100	---	103.7	109.7	115.8
Butter	1967=100	162.7	174.4	190.7	199.4
Cheese	12/77=100	---	103.2	109.4	116.3
Frozen desserts	12/77=100	---	104.7	109.4	115.2
Other	12/77=100	---	103.1	107.7	112.7

[1] For all urban consumers starting January 1978.

The retail dairy price index in May was 11 percent higher than a year earlier (figure 9). About two-thirds of the increase was the result of higher farm value. Although the year-to-year increase in margins was considerably larger than in 1978, it was slightly less than the general rate of inflation. The May increase in retail dairy prices from a year earlier was similar to the rises in prices of all foods or of all items.

Compared with a year earlier, the increase in prices of manufactured dairy products was somewhat greater than the rise in fluid milk prices. The largest rises were for butter and cheese.

UTILIZATION

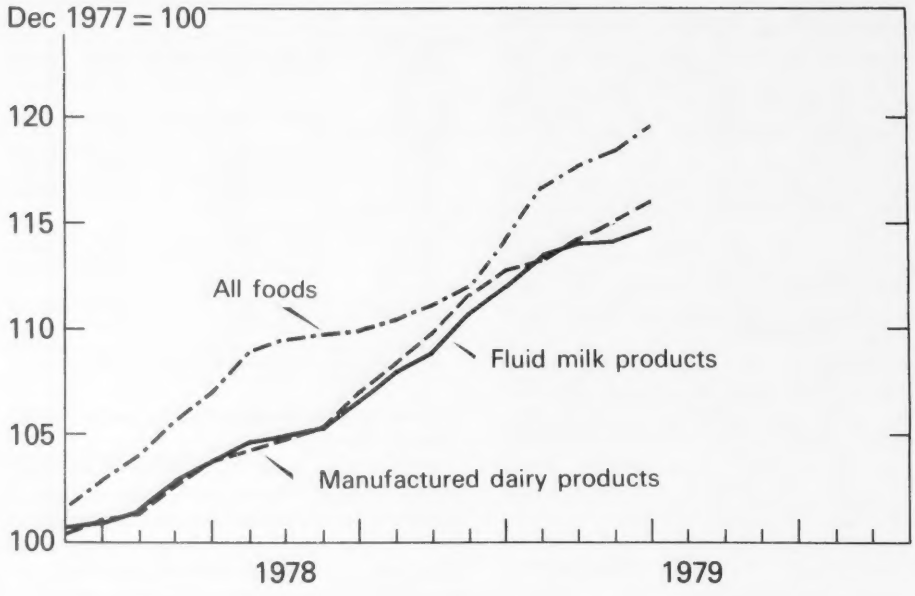
Manufactured Output Steady

With both milk production and fluid use close to a year earlier in April-May, supplies of milk available for manufacturing were also close to a year earlier—following more than a year of declines. This pattern probably will persist in coming months.

American cheese output this spring was just barely above a year ago. Despite strong demand for seasonal additions to commercial stocks, the generally sluggish commercial use restrained the amount of milk drawn into American cheese output. On the other hand, brisk sales of other varieties resulted in a 7-percent production increase in April-May.

With cheese production holding about steady and California milk output up substantially, butter production moved from 5 percent below a year earlier in April to 1 percent above in May. Preliminary June readings indicate another small

Retail Food And Dairy Product Prices



USDA

Figure 9

Neg. ESCS 38-79 (7)

Production of selected manufactured dairy products, 1978-79

Item	January-May		Change from year earlier	
	1978	1979[1]	1978	1979[1]
	Million pounds		*Percent*	
Butter	495.8	464.3	-1.3	-6.4
Cheese:				
American	896.2	927.7	-2.4	+3.5
Other	585.8	617.6	+10.4	+5.4
Cottage, creamed	371.8	363.8	-.3	-2.2
Canned milk	329.5	330.4	-10.1	+.3
Dry whole milk	34.9	38.5	+2.6	+10.3
Ice cream (Mil. gal.)	319.6	325.9	-.2	+2.0
Milk equivalent[2]	28,447	28,259	-1.4	-.7
Nonfat dry milk	428.4	378.7	-6.0	-11.6

[1] Preliminary. [2] Total all reported manufactured products.

increase. Similarly, nonfat dry milk production was larger than a year earlier in May, following a 7-percent decline in April.

If commercial use of American cheese expands as expected in coming months, cheese production probably will draw milk away from butter-powder operations and American cheese output will be larger than a year earlier. However, some of the increased cheese use will come from the larger commercial stocks and the decline in butter-powder output probably will not be dramatic—if supplies of milk for manufacturing hold close to a year ago.

April-May production of canned milk was about the same as a year earlier but dry whole milk output was larger. Production of edible dry whey products was larger than last year but condensed whey output was down.

Commercial Use Slackens

Commercial disappearance of milk and dairy products during April-May was close to a year-earlier (table 2). Total commercial use had posted strong gains in the preceding 7 quarters. This slackening indicates that the 1979 growth in commercial use probably will be below the 1970-78 trend rate of about 1 percent (figure 10). Expansion in consumer purchasing power has slowed since the first half of 1978 and probably will continue to weaken during the rest of 1979. In addition, year-to-year rises in retail dairy prices have kept pace with rises in all food prices—unlike 1978. Even so, total commercial disappearance during the rest of 1979 probably will stay close to or slightly above a year earlier.

Table 1—Production of selected manufactured dairy products, 1976-78

Item	1976	1977	1978[1]	Change from year earlier	
				1977	1978
	Million pounds			*Percent*	
Butter	978.6	1,085.6	994.3	+10.9	-8.4
From whole milk	517.8	619.2	514.9	+19.6	-16.8
From residual cream	460.8	466.4	479.4	+1.2	+2.8
Cheese:					
American	2,048.8	2,043.1	2,074.2	-.3	+1.5
Other	1,271.4	1,315.5	1,445.1	+3.5	+9.9
Creamed cottage	874.6	878.0	872.3	+.4	-.6
Canned milk	932.1	818.9	787.9	-12.1	-3.8
Dry whole milk	78.1	69.4	74.6	-11.1	+7.5
Ice cream (mil. gal.)	818.2	809.8	815.1	-1.0	+.7
Milk equivalent[2]	64,673	67,017	65,920	+3.6	-1.6
Nonfat dry milk	926.2	1,106.6	920.4	+19.5	-16.8

[1] Preliminary. [2] Total all manufactured products.

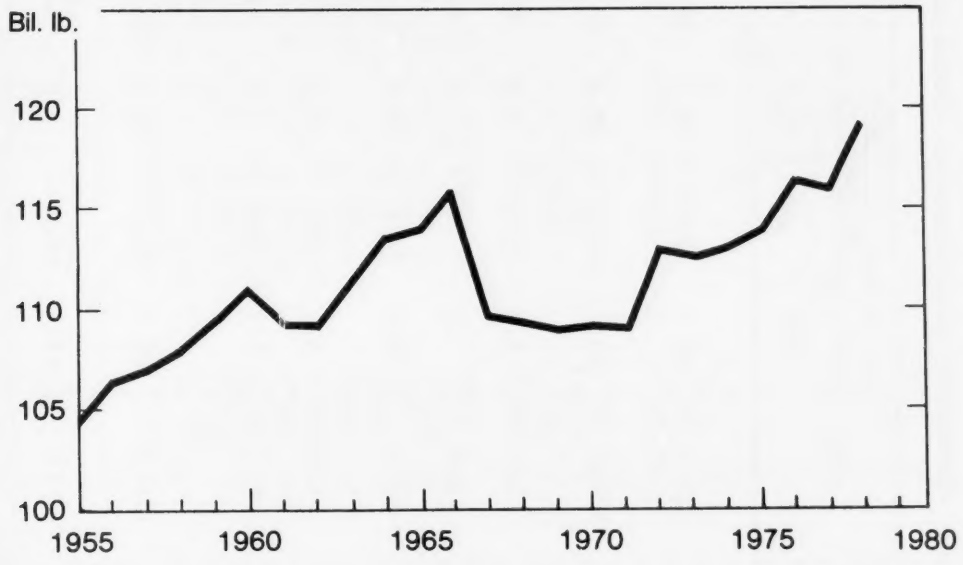


Figure 10

Table 2--Commercial disappearance: Total milk, annual and by quarters, 1977-79 1/

Item	1977	1978					1979 2/				
		By quarters				Annual	By quarters				Annual
		1st	2nd	3rd	4th		1st	Apr.-May	3rd	4th	
		Billion pounds									
Production	122.7	29.8	32.7	30.5	29.0	121.9	30.0	21.8			
Farm use	2.8	.7	.7	.7	.7	2.7	.6	.4			
Marketings	119.9	29.1	32.0	29.8	28.3	119.2	29.4	21.4			
Beginning commercial stocks	5.3	4.9	5.1	5.6	5.3	4.9	4.5	4.9			
Imports	2.0	.5	.4	.5	.9	2.3	.4	.3			
Total supply	127.1	34.5	37.5	35.9	34.5	126.4	34.2	26.6			
Ending commercial stocks	4.9	5.1	5.6	5.3	4.5	4.5	4.9	5.8			
Net removals	6.1	1.2	1.9	-.1	-.2	2.7	.2	.9			
Commercial disappearance Actual	116.1	28.4	30.0	30.7	30.2	119.3	29.1	19.8			
Percent change 3/	-.3	+4.4	+4.9	+.6	+1.2	+2.7	+2.6	-.5			

1/ Milk equivalent, fat solids basis. Totals may not add due to rounding
2/ Preliminary.
3/ From year earlier using unrounded data.

Table 3--Commercial disappearance: Selected dairy products, United States, annual 1969-78, quarters, 1978-79

Year and quarter	Butter 1/	Cheese		Nonfat dry milk	Canned Milk	Frozen products 3/
		American 2/	Other			
	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. gal.
1969	921.9	1,281.0	861.6	1,042.1	1,376.1	1,092.2
1970	898.2	1,398.0	909.1	983.2	1,213.8	1,097.3
1971	847.1	1,454.8	987.0	981.8	1,186.9	1,102.4
1972	885.4	1,595.7	1,127.8	919.2	1,102.6	1,108.6
1973	855.6	1,677.1	1,210.2	1,110.1	1,056.7	1,118.6
1974	929.9	1,780.6	1,276.5	809.9	999.5	1,128.0
1975	951.0	1,717.1	1,331.9	697.0	923.9	1,183.9
1976	919.0	1,920.9	1,458.0	719.2	899.0	1,154.0
1977	859.8	1,958.8	1,512.3	682.2	799.2	1,167.6
1978	903.5	2,064.7	1,655.1	658.4	776.1	1,170.4
1978 - 1st	225.4	527.7	388.5	177.9	196.7	249.2
2nd	217.7	518.7	388.2	135.2	179.7	333.8
3rd	222.3	497.7	405.5	190.3	163.6	346.3
4th	238.2	520.6	472.9	155.0	236.0	241.1
1979 - 1st	247.2	518.2	391.3	170.9	194.4	250.5
Apr.-May	135.1	350.1	281.1	67.4	108.2	205.8
3rd						
4th						
	1978-79 percent change					
1st	+9.7	-1.8	+0.7	-3.9	-1.2	+.5
Apr.-May	-3.6	-1.2	+8.4	-17.7	-10.9	-.2
3rd						
4th						

1/ Imports include butter equivalent of butteroil. 2/ Imports include Colby cheese; stocks do not include processed cheese. 3/ Excludes Mellorine.

In April-May, commercial disappearance of American cheese was 1 percent below a year earlier, while use of other varieties was up about 8 percent (table 3). This atypical pattern of weak sales of American types and strong sales of other types also appeared during October-March. One factor in the lackluster performance of American cheese disappearance probably was the lower use of process cheese by fast-food establishments.

Changes in January-May dairy sales from year earlier

Item	Change
	Percent
Total milk[1]	+1.3
Manufactured products:	
American cheese	-1.6
Other cheese	+3.8
Cottage cheese[2]	-1.6
Butter	+4.6
Ice cream	+2.0
Ice milk	-4.5
Canned milk	-4.9
Nonfat dry milk	-8.3
Fluid products	-.2
Whole milk	-3.1
Skim and lowfat milk	+4.4
Cream and mixtures	[3]-.5

[1] On a milk equivalent, fat-solids basis. [2] Creamed and low-fat. [3] January-April.

The declines in American cheese sales are not likely to persist. Since 1970, only about a fifth of the quarterly readings have been below a year earlier and disappearance has not been down for more than 3 consecutive quarters. In coming months, the underlying trend probably will reassert itself, although the expected price and demand conditions likely will forestall dramatic increases. In fact, gains in use of other varieties may well slow.

April-May sales of butter were 4 percent below the fairly good level of a year earlier. Retail butter prices have increased considerably more rapidly than retail margarine prices and retail butter sales probably have weakened. Ingredient usage may also have slackened with the general slowing in the economy.

Commercial disappearance of nonfat dry milk was below even the low levels of April-May 1978, while cottage cheese sales also were lower. On the other hand, ice cream sales were fairly good.

Fluid milk sales were slightly below a year earlier in April-May. The decline of almost 1 percent compared with a very slight increase during the first quarter.

Per Capita Fluid Sales Slipped in 1978

Since 1975, total sales of fluid milk and cream (on a product pound basis) have been virtually unchanged, resulting in a slow but steady decline in per capita sales (tables 6 and 7). Year-to-year changes in total fluid sales during that period have not exceeded a quarter of 1 percent—even though this period included years when retail fluid prices rose both considerably faster and considerably slower than prices of all food or other beverages.

Per capita sales of fluid milk and cream in 1978 totaled almost 259 pounds, down less than 1 percent from a year earlier and more than 4 percent from 1970. The 2-percent increase in sales of cream and specialty items offset just a small part of the decline in per person sales of beverage milks (table 8, figure 11).

The longrun shift from whole milk to lowfat milks continued in 1978. This shift has been the result of the generally lower price of lowfat milks and of dietary considerations. Per capita whole milk sales declined 4½ pounds last year while lowfat sales were up 3½ pounds. Skim milk use was down slightly in 1978; per person sales of skim milk have varied but have not exhibited a trend since the early 1960's. In 1978, per capita sales of flavored milks declined for the first time since 1970 while buttermilk continued to lose popularity.

Per capita sales of cream items continued the relative stability of recent years. In contrast to the earlier downward trend, sales of plain cream items have been nearly steady since the early-1970's and half-and-half sales stabilized in the mid-1970's. Retail prices of fluid cream probably have declined, relative to prices of other dairy products, since 1970—reflecting the large shift in value from cream to the skim component of milk during 1971-74 and the substantial cost savings resulting from the use of sterilization.

Cultured dairy products remain a bright spot for the fluid industry. Per capita use of yogurt has tripled since 1970. Although less spectacular, sour cream sales have increased every year but one since 1970.

Commercial Stocks Rebuilt

By June 1, commercial stocks of dairy products had been brought fairly well in line with expected needs. Holdings of milkfat were 6 percent larger than last year's low level while stocks of milk solids-not-fat were 16 percent larger. Between January 1 and June 1, seasonal rebuilding of commercial dairy stocks absorbed the equivalent of 0.8 billion pounds more milk this year than a year earlier.

Industry holdings of American cheese on June 1 were almost 11 percent larger than a year earlier. Although well above the low 1978 levels, this year's holdings were much less than the burdensome stocks of 1974 or 1977. Last year, cheese stocks were held to low levels in early spring in

Table 4--Milk and dairy product sales (domestic disappearance, commercial sources) total and per capita, selected years, United States, 1970-78 1/

Year	Fluid milk product sales					Butter	Cheese			Evaporated and condensed	
	Fluid whole milk	Cream 2/	Low-fat milk 3/	Total product weight	Whole milk equivalent 4/		Whole and part skim milk 5/		Cottage cheese 6/	Whole milk	Skimmed milk
							American	Other			
	Total										
	Million pounds										
1970	42,956	1,067	10,289	54,312	51,998	902	1,393	892	1,060	1,349	1,016
1971	42,108	1,076	11,485	54,669	51,853	878	1,452	971	1,108	1,303	1,039
1972	41,851	1,093	12,826	55,770	53,227	861	1,573	1,110	1,133	1,236	980
1973	40,443	1,130	14,062	55,635	52,413	846	1,661	1,193	1,103	1,194	894
1974	38,358	1,143	14,815	54,316	50,514	917	1,771	1,267	992	1,154	732
1975	38,256	1,175	16,558	55,989	51,123	948	1,692	1,317	1,006	1,097	761
1976	37,061	1,189	17,710	55,960	51,505	932	1,912	1,446	1,025	1,046	783
1977	35,638	1,199	18,988	55,825	51,383	860	1,912	1,493	1,032	939	854
1978 7/	34,868	1,216	19,851	55,935	51,196	894	2,050	1,627	1,038	885	772
	Per capita 8/										
	Pounds										
1970	214	5.3	51.3	271	259	4.4	6.8	4.4	5.2	6.6	5.0
1971	207	5.3	56.5	269	255	4.3	7.0	4.7	5.4	6.3	5.0
1972	204	5.3	62.5	272	259	4.1	7.6	5.3	5.4	5.9	4.7
1973	195	5.5	67.9	269	253	4.0	7.9	5.7	5.3	5.7	4.3
1974	184	5.5	70.9	260	242	4.3	8.4	6.0	4.7	5.5	3.5
1975	181	5.6	78.5	266	243	4.4	8.0	6.2	4.7	5.1	3.6
1976	174	5.6	83.3	263	242	4.3	8.9	6.7	4.8	4.9	3.6
1977	166	5.6	88.4	260	239	4.0	8.8	6.9	4.8	4.3	3.9
1978 7/	161	5.6	91.7	259	237	4.1	9.4	7.5	4.8	4.1	3.5

Year	Frozen products					Dry products			
	Ice cream	Ice milk	Sherbet	Other	Mello-rine	Whole milk	Nonfat dry milk	Buttermilk	Whey 9/
	Total								
	Million pounds								
1970	3,656	1,577	318	40	249	43	960	51	294
1971	3,676	1,582	317	47	232	32	958	55	319
1972	3,685	1,599	325	53	218	24	853	48	377
1973	3,714	1,604	346	70	191	21	1,056	39	384
1974	3,753	1,629	325	56	166	15	839	44	453
1975	4,015	1,643	316	66	144	16	668	44	477
1976	3,928	1,574	322	64	112	33	743	38	527
1977	3,887	1,694	324	72	90	34	698	59	530
1978 7/	3,912	1,689	312	78	78	56	634	50	543
	Per capita 8/								
	Pounds								
1970	17.9	7.7	1.6	0.2	1.2	0.2	4.7	0.3	1.5
1971	17.8	7.7	1.5	.2	1.1	.2	4.6	.3	1.6
1972	17.7	7.7	1.6	.3	1.0	.1	4.1	.2	1.8
1973	17.7	7.6	1.6	.3	.9	.1	5.0	.2	1.8
1974	17.8	7.7	1.5	.3	.8	.1	4.0	.2	2.1
1975	18.8	7.7	1.5	.3	.7	.1	3.1	.2	2.2
1976	18.3	7.3	1.5	.3	.5	.2	3.5	.2	2.5
1977	18.0	7.8	1.5	.3	.4	.2	3.2	.3	2.5
1978 7/	17.9	7.7	1.4	.4	.4	.3	2.9	.2	2.5

1/ Excludes milk used on farms where produced and distribution from USDA supplies; includes sales to the Armed Services for use in the United States.
2/ Includes milk and cream mixtures.
3/ Includes skim milk, buttermilk, flavored milk drinks, and yogurt.
4/ Fat solids basis.
5/ Excludes cottage cheese.
6/ Includes full-skim American.
7/ Preliminary.
8/ Based on resident population, except fluid milk product sales--based on estimated population using fluid products from purchased sources.
9/ Includes modified whey products starting 1975.

Table 5--Sales of individual fluid products as a proportion of average daily fluid milk sales, all Federal order markets, 1965, 1970, and 1974-78

Fluid items	1965 1/	1970	1974	1975	1976	1977	1978
				Percent			
Whole milk 2/	83.7	76.1	67.6	65.6	63.4	61.1	59.8
Flavored whole milk	2.6	2.5	2.7	2.6	2.7	2.7	2.5
Total whole milk items	86.3	78.6	70.3	68.2	66.1	63.8	62.3
Low-fat (2%) milk	4/	12.1	18.5	21.4	22.8	24.4	26.1
Plain	4/	3.3	9.3	11.6	14.3	15.8	18.1
Solids added	4/	8.8	9.2	9.8	8.5	8.6	8.0
Skim milk	8.6	4.3	5.4	4.2	4.3	4.5	4.4
Plain	2.8	1.1	1.8	1.7	1.9	2.1	2.3
Solids added	5.9	3.2	3.6	2.5	2.4	2.4	2.1
Buttermilk	5/ 2.0	1.9	1.8	1.8	1.8	1.8	1.7
Yogurt	---	.3	.6	.7	.8	1.0	1.0
Flavored milk drinks	.7	.8	1.3	1.5	2.0	2.4	2.4
Total skim and low-fat milk items 3/	11.3	19.4	27.6	29.6	31.7	34.1	35.6
Milk and cream mixtures	1.3	1.1	.9	.9	.9	1.0	.9
Light cream	.4	.2	.2	.2	.2	.1	.2
Heavy cream	.3	.2	.2	.2	.2	.2	.2
Sour cream	.3	.4	.5	.6	.6	.7	.7
Total cream items 3/	.9	.8	.9	1.0	1.0	1.0	1.1
Eggnog	.1	.2	.2	.2	.2	.2	.2
Total fluid milk and cream 3/	100.0	100.0	100.0	100.0	100.0	100.0	100.0

1/ Excludes New York-New Jersey market.
2/ Includes whole milk equivalent of small quantity of concentrated milk.
3/ Totals may not add due to rounding.
4/ Included with skim milk.
5/ Includes small quantities of yogurt and cultured specialties.

Table 6--Sales of individual beverage milk products, United States, 1954-78

Year	Plain whole milk	Lowfat milk	Skim milk	Filled and imitation milk	Flavored milk and drinks	Buttermilk	Total
				1,000 pounds			
1954	38,604,960	34,240	961,460	0	1,070,850	1,218,300	41,889,810
1955	39,915,940	50,030	1,046,750	0	1,146,650	1,236,580	43,395,950
1956	41,277,190	66,510	1,182,590	0	1,188,750	1,195,880	44,910,920
1957	42,217,840	80,540	1,351,600	0	1,162,660	1,184,010	45,996,650
1958	42,382,790	192,410	1,491,710	0	1,180,050	1,159,810	46,344,770
1959	42,548,300	284,540	1,648,330	0	1,189,280	1,151,930	46,822,380
1960	42,999,350	389,180	1,830,140	0	1,200,250	1,139,730	47,558,650
1961	42,606,330	600,960	1,977,610	0	1,278,160	1,092,480	47,555,540
1962	43,039,510	840,020	2,078,490	0	1,343,060	1,159,920	48,461,000
1963	43,749,260	1,170,690	2,227,840	0	1,489,730	1,171,890	49,809,410
1964	44,205,430	1,605,890	2,336,180	0	1,570,800	1,166,260	50,884,560
1965	44,512,450	2,056,550	2,368,030	0	1,646,860	1,155,750	51,739,640
1966	44,671,870	2,769,740	2,097,370	3,100	1,720,380	1,155,030	52,417,490
1967	43,218,510	3,550,750	2,077,110	45,600	1,662,250	1,139,350	51,693,570
1968	42,705,970	4,427,400	2,207,370	163,610	1,757,620	1,142,030	52,404,000
1969	41,934,850	5,396,130	2,320,250	153,620	1,748,690	1,146,670	52,700,210
1970	41,511,710	6,162,570	2,378,400	122,490	1,762,900	1,134,950	53,073,020
1971	40,595,920	7,287,010	2,345,370	108,580	1,870,720	1,149,350	53,356,950
1972	40,252,266	8,277,310	2,608,977	96,610	2,001,614	1,156,468	54,393,245
1973	38,849,170	9,189,215	2,949,038	81,339	2,044,324	1,075,229	54,188,315
1974	36,908,055	9,778,193	2,970,078	74,503	2,083,346	1,015,804	52,829,979
1975	36,924,145	11,703,142	2,528,589	56,804	2,122,585	1,031,831	54,367,096
1976	35,668,574	12,621,789	2,555,072	44,783	2,364,493	1,035,401	54,290,112
1977	34,300,201	13,572,542	2,638,795	39,563	2,525,214	1,016,373	54,092,688
1978 1/	33,615,710	14,449,213	2,574,772	36,398	2,483,064	995,411	54,154,568

1/ Preliminary.

Table 7--Sales of individual cream and specialty products, United States, 1954-78

Year	Half-and-half	Light cream	Heavy cream	Sour cream and dips	Imitation sour cream	Yogurt	Eggnog	Total
				1,000 pounds				
1954	559,400	372,880	209,530	96,980	0	14,960	32,170	1,285,920
1955	604,820	351,750	205,860	100,520	0	16,850	36,250	1,316,050
1956	652,330	335,470	207,180	105,980	0	18,760	36,200	1,355,920
1957	687,560	304,070	202,100	113,490	0	21,160	38,080	1,366,460
1958	722,050	283,770	193,730	123,730	0	25,630	42,790	1,391,700
1959	748,800	264,130	183,740	136,810	0	38,330	45,850	1,417,660
1960	795,500	250,070	177,940	154,440	0	44,130	45,840	1,467,920
1961	805,960	231,360	169,190	163,310	0	48,580	46,080	1,464,480
1962	785,090	220,110	173,700	175,330	0	45,520	49,610	1,449,360
1963	773,140	192,740	167,720	184,280	0	50,440	49,420	1,417,540
1964	759,870	175,020	162,190	172,480	0	53,020	47,140	1,369,720
1965	749,180	162,420	157,210	178,750	0	60,640	48,770	1,356,970
1966	732,230	143,770	148,420	186,100	30	70,030	52,290	1,332,870
1967	687,040	125,000	138,620	182,520	730	90,230	50,440	1,274,580
1968	661,880	101,930	127,200	186,900	1,640	123,520	57,750	1,260,820
1969	632,170	90,500	113,450	189,830	1,680	168,960	56,920	1,253,510
1970	593,420	75,980	112,310	222,600	1,750	171,570	61,330	1,238,960
1971	560,910	66,610	112,490	251,320	1,910	236,290	82,640	1,312,170
1972	552,962	57,208	116,925	268,269	1,660	284,036	96,326	1,377,386
1973	559,614	80,470	121,576	276,126	N.A.	317,934	92,018	1,447,738
1974	528,760	84,107	118,559	315,840	N.A.	343,225	95,443	1,485,934
1975	525,198	89,325	121,480	358,080	N.A.	445,435	81,900	1,621,418
1976	538,385	77,248	130,986	355,106	N.A.	481,707	86,857	1,670,289
1977	541,159	68,482	127,518	366,969	N.A.	533,549	94,292	1,731,969
1978 1/	543,831	71,329	124,342	381,520	N.A.	565,189	94,537	1,780,748

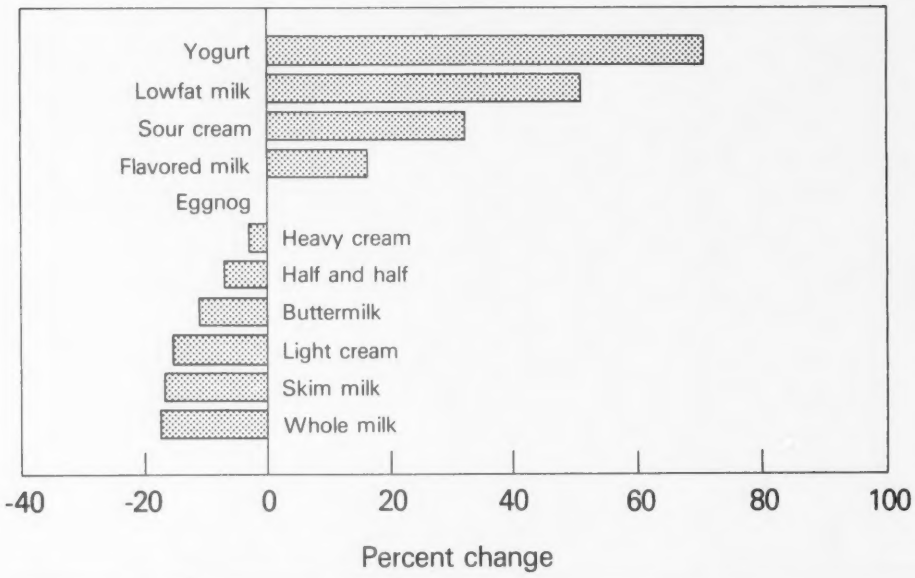
1/ Preliminary.

Table 8--Per capita sales of selected fluid milk items, 1954-78

Year	Plain whole milk	Lowfat milk	Skim milk	Flavored milk and drinks	Butter-milk	Yogurt	Eggnog	Half-and-half	Light cream	Heavy cream	Sour cream and dips
					Pounds						
1954	262.44	0.23	6.54	7.28	8.28	0.10	0.22	3.80	2.53	1.42	0.66
1955	264.69	.33	6.94	7.60	8.20	.11	.24	4.01	2.33	1.37	.67
1956	267.17	.43	7.65	7.69	7.74	.12	.23	4.22	2.17	1.34	.69
1957	266.02	.51	8.52	7.33	7.46	.13	.24	4.33	1.92	1.27	.72
1958	260.66	1.18	9.17	7.26	7.13	.16	.26	4.44	1.75	1.19	.76
1959	255.24	1.71	9.89	7.13	6.91	.23	.28	4.49	1.58	1.10	.82
1960	250.87	2.27	10.68	7.00	6.65	.26	.27	4.64	1.46	1.04	.90
1961	243.19	3.43	11.29	7.30	6.24	.28	.26	4.60	1.32	.97	.93
1962	240.85	4.70	11.63	7.52	6.49	.25	.28	4.39	1.23	.97	.98
1963	240.38	6.43	12.24	8.19	6.44	.28	.27	4.25	1.06	.92	1.01
1964	238.56	8.67	12.61	8.48	6.29	.29	.25	4.10	.94	.88	.93
1965	236.52	10.93	12.58	8.75	6.14	.32	.26	3.98	.86	.84	.95
1966	234.13	14.52	10.99	9.02	6.05	.37	.27	3.84	.75	.78	.98
1967	223.70	18.38	10.75	8.60	5.90	.47	.26	3.56	.65	.72	.94
1968	218.56	22.66	11.30	8.99	5.84	.63	.30	3.39	.52	.65	.96
1969	212.11	27.29	11.74	8.85	5.80	.85	.29	3.20	.46	.57	.96
1970	207.14	30.75	11.87	8.80	5.66	.86	.31	2.96	.38	.56	1.11
1971	199.88	35.88	11.55	9.21	5.66	1.16	.41	2.76	.33	.55	1.24
1972	196.07	40.32	12.71	9.75	5.63	1.38	.47	2.69	.28	.57	1.31
1973	187.50	44.35	14.23	9.87	5.19	1.53	.44	2.70	.39	.59	1.33
1974	176.68	46.81	14.22	9.97	4.86	1.64	.46	2.53	.40	.57	1.51
1975	175.16	55.52	12.00	10.08	4.89	2.11	.39	2.49	.42	.58	1.70
1976	167.77	59.37	12.02	11.12	4.87	2.27	.41	2.53	.36	.62	1.67
1977	159.98	63.30	12.31	11.78	4.74	2.49	.44	2.52	.32	.59	1.71
1978 1/	155.41	66.80	11.90	11.48	4.60	2.61	.44	2.51	.33	.57	1.76

1/ Preliminary.

Changes in Fluid Product Sales Per Capita, 1973 to 1978



USDA

Figure 11

Neg. ESCS 240-79 (7)

Dairy product stocks

Item	June 1 1977	June 1 1978	June 1 1979
	Million pounds		
Commercial:			
Butter	57.1	52.4	47.2
American cheese	466.7	371.6	411.9
Other cheese	67.0	69.3	79.7
Nonfat dry milk	119.4	87.2	110.5
Milkfat	227.6	192.1	204.5
Solids-not-fat	302.3	238.6	277.5
Milk equivalent	6,525	5,454	5,830
Government:			
Butter	106.7	212.3	190.2
American cheese	23.6	37.3	2.4
Nonfat dry milk	419.1	600.9	414.5
Milkfat	93.5	182.9	153.9
Solids-not-fat	410.4	589.6	299.4
Milk equivalent	2,436	4,752	3,952

anticipation of a large flush season surplus which never materialized. By late spring, strong sales and weakening milk output kept American cheese stocks low. Stocks of other varieties on June 1 were 15 percent greater than last year and record-high for that date. However, they probably were not out of line with the current expanded usage.

June 1 commercial stocks of butter were a tenth below a year earlier. Commercial butter inventories have stayed below a year earlier since March 1978. Manufacturers' stocks of nonfat dry milk were about a fourth larger than a year ago.

Manufacturers' holdings of canned milk were larger than a year earlier but dry whole milk stocks were smaller. Commercial stocks of edible whey products remained greater than last year.

If both milk output and commercial use during the rest of 1979 remain close to a year earlier as expected, the June 1 stock levels likely will result in seasonal price rises sufficient to cover at least most of the costs of storage but would forestall very sharp price rises.

Surplus Purchases Light

USDA purchases under the price support program were relatively small this spring, largely reflecting the larger-than-normal seasonal rebuilding of commercial stocks. The equivalent of only 1.1 billion pounds of milk was removed from the commercial market during April-June, just more than half the level of last year and less than half the purchases of 2 years earlier. For the first half of 1979, USDA purchases were less than half those of a year earlier and just over a fourth of the large 1977 removals.

USDA dairy purchases[1]

Item	January-June		
	1978	1979	Change
	Million pounds		*Percent*
Butter	134.4	60.4	-55.1
American cheese	22.6	3.5	-84.6
Nonfat dry milk	196.9	120.9	-38.6
Evaporated milk	8.4	9.0	+7.1
Milk equivalent	3,016	1,302	-56.8

[1] Delivery basis.

The 49 million pounds of butter bought in April-June brought the total for the first half of 1979 to 60 million pounds, down more than half from a year earlier. The decline in nonfat dry milk purchases was more modest. Purchases during January-June were down 39 percent, with April-June removals down only an eighth.

Through June, only 12 million pounds of American cheese—predominantly process cheese for summer delivery—had been purchased by CCC. Small amounts of barrel cheese had been bought.

Under the expected conditions, support purchases of butter and cheese this summer probably will be minor. While nonfat dry milk purchases may continue through the summer (at least on the West Coast), purchases are not expected to be large. The amount of milk drawn away from butter-powder production by cheese plants will have a large bearing on the size of summer removals of nonfat dry milk.

With the current sell-back policy of 105 percent of the support purchase prices, some butter may be sold back to the industry for unrestricted use during late summer or fall. Although less likely, sales of nonfat dry milk are also possible this fall. The situation could occur where purchases would be made on the West Coast at the same time as sales in other areas.

On July 1, CCC uncommitted inventories totaled 181 million pounds of butter, 478 million pounds of nonfat dry milk, and 6 million pounds of cheese. Butter holdings were down about a fourth from a year earlier while nonfat dry milk inventories were a fifth lower.

Uncommitted CCC stocks

Item	June 30	
	1978	1979
	Million pounds	
Butter	246.9	180.7
American cheese	55.3	6.1
Nonfat dry milk	597.5	478.2

FOREIGN DAIRY TRADE AND TRENDS

Cheese Imports Rebound

After a surge in the fall of 1978 and a drop in the past winter (related to countervailing duties), cheese imports were much more settled this spring. The April-May total was almost 12 percent larger than a year earlier. Imports of both quota and non-quota cheese were larger (table 9).

U.S. dairy trade
(milk equivalent)

Year and quarters	Imports		Exports	Shipments[1]
	Cheese	Other		
	Million pounds			
1978				
1st	379	157	87	168
2nd	337	51	105	156
3rd	484	24	85	145
4th	799	72	91	133
Year[2]	1,999	307	368	602
1979				
1st	251	133	98	150
April-May	253	32	61	110

[1] To U.S. territories. [2] May not add due to rounding.

April-May imports of most other quota items were larger. Casein imports were larger than a year earlier during April-May, more than offsetting the decline in the first quarter. Imports of lactose were very small.

April-May imports were equivalent to about 285 million pounds of milk, up about 12 percent from a year earlier. However, the total for the first 5 months of 1979 was about 15 percent lower because of the sharp first quarter decline.

After an increase during the first quarter, commercial exports of dairy products fell about a tenth from a year earlier in April-May. Although exports of canned milk and butter were higher, less cheese and dry whole milk were exported. Food-aid exports of nonfat dry milk and corn-soya-milk mixtures were a little larger.

Forage Conditions Reduce EC Output

Unfavorable forage conditions this spring helped ease surplus problems in the European Community (EC). After a 3-percent rise in the first quarter, EC milk deliveries were just barely above a year earlier in April and fell below in May. Cheese production remained larger than a year earlier while butter-powder production was smaller. The dip in EC milk output probably will be tempo-

Table 9--Dairy Products: U.S. imports, quota and non-quota, total 1978, and January-May, 1978-79 1/

Product	Calendar year quota	1978 imports	May			Cumulative, January-May		
			1978	1979	1979 as a % of 1978	1978	1979	1979 as a % of 1978
	Thou. lb.	Thou. lb.	Thou. lb.	Thou. lb.	Pct.	Thou. lb.	Thou. lb.	Pct.
Cheese, quota types								
American-Cheddar	10,037.5	10,748	1,546	753	49	4,245	3,207	76
-Other	6,096.6	7,037	--	361	--	857	1,449	169
Italian-Original loaves	11,500.1	8,994	661	600	91	3,691	2,780	75
-Other	1,494.0	1,317	62	33	53	532	369	69
Edam and Gouda-Natural	9,200.4	8,601	651	713	110	2,363	1,833	78
-Processed	3,151.0	3,079	33	10	30	100	34	34
Blue Mold	5,017.0	5,505	228	469	206	1,799	914	51
Swiss-Emmenthaler 2/	20,420.0	14,032	556	1,596	287	3,123	4,427	142
-Gruyere-process 2/	11,242.0	10,607	339	612	181	1,641	1,800	110
Other-Over 0.5% fat 2/	40,730.0	38,374	491	1,504	306	3,887	7,403	190
-Under 0.5% fat 2/	8,901.0	2,457	--	34	--	42	81	193
Total	127,789.6	110,752	4,567	6,685	146	22,281	24,297	109
Cheese, non-quota types								
Swiss-Emmenthaler		59,647	4,364	4,308	99	23,485	16,079	68
-Gruyere-process		8,329	520	360	69	2,572	1,446	56
Other		39,899	2,848	2,889	101	14,582	12,948	89
Pecorino		20,288	1,308	1,025	78	8,462	5,077	60
Roquefort		1,471	34	163	479	682	310	45
Other 3/		1,800	117	99	85	618	420	68
Total		131,434	9,191	8,842	96	50,401	36,280	72
Other quota products								
Butter	707.0	736	15	62	413	225	215	96
Butteroil	1,200.0	1,200	--	--	--	1,200	1,200	100
Butterfat mixtures	2,580.0	4/2,757	229	--	--	686	482	70
Ice cream	3,377.3	4/4,360	424	--	--	1,134	1,911	169
Frozen cream	12,540.0	4/14,586	339	1,673	494	10,297	8,449	82
Nonfat dry milk	1,807.0	4/2,388	100	202	202	859	1,175	137
Dried buttermilk	496.0	478	--	--	--	124	--	--
Evaporated milk	1,312.0	--	--	--	--	--	--	--
Condensed milk	4,079.0	887	--	--	--	431	198	46
Chocolate crumb-Regular	17,000.0	8,686	296	676	228	2,293	3,789	165
-Lowfat	4,680.0	1,546	200	478	239	320	1,031	322
Animal feed with milk solids	16,300.0	14,647	900	225	25	3,722	2,791	75
Non-quota products								
Casein		137,134	7,258	12,413	171	60,292	63,350	105
Lactose		3,112	338	156	46	1,733	534	31
Milk equivalent, fat solids basis total all products	1,305,620	2,305,258	126,515	153,434	121	790,166	669,709	85

1/ Preliminary. 2/ Subject to quota if f.o.b. price is less than "pricebreak" (7 cents above the American cheese support purchase price, rounded to nearest whole cent--$1.23 effective April 13, 1979. 3/ Gjetost, Bryndza, Gammelost and Noekkelost, and Goya. 4/ Probable error in reported data.

Table 10--Dairy products: U.S. imports, 1968-78

Product	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978 1/
					Thousand pounds						
Cheese											
American-Cheddar	9,841	9,606	9,720	9,324	9,516	20,010	106,999	10,600	7,984	9,337	10,748
-Other	5,860	6,034	5,969	7,624	5,957	8,430	5,098	6,033	6,241	6,407	7,037
Total American	15,701	15,640	15,689	16,948	15,473	28,440	112,097	16,633	14,225	15,744	17,785
Italian-Original loaves	8,389	10,547	6,617	6,458	10,802	10,524	8,985	10,173	11,067	9,803	8,994
-Other	1,853	1,742	674	852	1,350	1,517	1,185	1,232	1,442	1,343	1,317
Total Italian	10,242	12,289	7,291	7,310	12,152	12,041	10,170	11,405	12,509	11,146	10,311
Edam and Gouda-Natural	8,626	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	8,524	8,251	8,601
-Processed	12,760	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	499	1,064	3,079
Total Edam and Gouda	21,386	11,457	11,799	10,127	10,146	11,596	9,373	9,207	9,023	9,315	11,680
Blue Mold	4,822	4,878	4,766	4,485	4,434	5,994	5,016	4,564	4,593	3,354	5,505
Swiss-Emmenthaler, "pricebreak" and over 2/	7,990	16,322	22,762	21,809	30,366	24,725	51,158	36,279	48,499	45,494	59,647
-Emmenthaler, under "pricebreak"	30,861	3,786	3,592	2,508	3,206	24,875	12,647	10,473	12,435	14,133	14,032
-Gruyere-process, "pricebreak" and over	5,724	9,401	10,800	8,937	9,882	5,703	9,018	5,322	6,741	5,881	8,329
-Gruyere-process, under "pricebreak"	14,253	3,248	3,149	2,662	2,904	9,936	6,285	6,829	8,690	9,399	10,607
Total Swiss	58,828	32,757	40,303	35,916	46,358	65,239	79,108	58,902	76,365	74,907	92,615
Other, "pricebreak" and over	7,820	12,701	22,631	18,812	31,820	21,241	35,853	26,155	34,405	31,940	39,899
Other, under "pricebreak"	31,291	23,541	23,371	14,849	23,680	52,477	35,478	25,832	31,116	38,308	38,374
Other, low-fat	268	8,932	10,752	7,025	8,397	11,965	8,616	6,667	4,741	4,981	2,457
Total Other	39,379	45,174	56,754	40,686	63,897	85,683	79,947	58,654	70,262	75,229	80,730
Pecorino	17,352	19,227	20,621	16,566	22,976	17,215	16,465	17,114	16,728	15,825	20,288
Roquefort	1,948	2,061	2,063	1,671	2,543	2,126	1,439	1,392	1,560	1,620	1,471
Gjetost	330	321	413	397	438	454	473	512	517	512	583
Bryndza	101	127	156	257	322	309	679	400	543	464	490
Gammelost and Noekkelost	335	182	256	473	748	698	716	628	627	503	727
Goya	---	---	761	1,039	3	6	41	18	325	781	0
Other products											
Butter	739	678	3/ 747	628	714	55,574	450	526	562	743	736
Butteroil	1,200	1,200	1,200	1,200	1,200	23,800	1,200	1,200	1,200	1,200	1,200
Butterfat mixtures	1,882	4/ 2,741	2,398	2,572	2,430	2,565	---	1,828	2,468	2,393	2,757
Frozen cream	12,607	14,748	11,062	11,235	12,600	12,540	12,406	12,353	12,964	12,529	14,586
Evaporated milk	4,908	1,313	1,236	1,299	94	1,209	1,214	455	28	44	---
Condensed milk	4,854	4,058	1,506	1,670	2,345	1,419	1,393	445	639	767	887
Chocolate crumb-Regular	45,337	18,603	15,260	12,803	9,652	5,624	5,859	2,323	9,246	6,817	8,686
-Lowfat	---	478	15,944	4,185	3,171	176	---	2,086	2,604	2,425	1,546
Total chocolate crumb	45,337	19,081	31,204	16,988	12,823	5,800	5,859	4,409	11,850	9,242	10,232
Ice cream	---	20,263	62,689	2,549	1,375	---	---	---	373	3,187	4,360
Dried products											
Whole milk	7	7	3	10	---	---	17	7	9	1	82
Malted milk	1	---	1	2	6	13	10	---	2	5	6/
Buttermilk	536	174	421	355	594	270	137	783	444	179	478
Skim milk	1,747	1,914	1,759	2,136	1,602	266,564	115,065	2,465	1,807	1,825	2,388
Casein	116,100	116,107	135,288	105,939	105,401	112,828	112,889	58,444	112,141	144,245	137,134
Lactose	374	4,187	4,222	1,652	1,540	1,356	1,310	5,501	1,267	3,991	3,112
Animal feed 5/	---	9,965	27,297	11,812	10,356	15,793	9,009	15,795	12,226	12,815	14,647
					Million pounds						
Milk equivalent, fat solids basis, total all products	1,780	1,621	1,878	1,356	1,694	3,859	2,923	1,669	1,943	1,968	2,305

1/ Preliminary. 2/ Pricebreak of 47 cents changed to $.62 on June 3, 1972; to $.69 on March 15, 1973; to $.72 on August 29, 1973; to $.78 on April 1, 1974; to $.84 on January 16, 1975; to $.86 on April 9, 1975; to $.92 on October 16, 1975; to $.98 on April 14, 1976; to $1.00 on October 19, 1976; to $1.05 on May 5, 1977 to $1.10 on April 1, 1978; and $1.13 on November 2, 1978. 3/ Includes 40,400 pounds not subject to quota. 4/ Excludes 1.7 million pounds in retail packages reported by the Bureau of Customs. 5/ Containing milk products. 6/ Less than 500 pounds.

rary, since the EC programs to permanently curtail milk production have not been particularly successful.

EC intervention stocks of butter on June 1 were more than 400,000 metric tons (0.9 billion pounds), about a half larger than a year earlier and increasing seasonally. Conversely, programs to increase domestic and export use of nonfat dry milk have dropped intervention stocks to less than 450,000 metric tons (1 billion pounds). June 1 powder holdings were down almost half from a year earlier and have been declining counter-seasonally.

Elsewhere in Western Europe, milk output has expanded modestly, except for a policy-related substantial decline in Austria. Generally, milk has been diverted from butter-powder to cheese production. Winter milk production in selected Eastern European countries ran below a year earlier.

After drought conditions at the start of 1979, improved forage conditions brought New Zealand's milk production above a year earlier during the last part of their season. Meanwhile, Australian milk output has fluctuated around the reduced 1978 levels. Milk production in Canada this winter was significantly larger than a year earlier. In all 3 countries, cheese production has been favored over butter-powder output. Japanese milk production has continued to expand sharply.

Table 11.--U.S. Dairy Situation at a Glance

Item	Unit or base period	1977	1978					1979		
		May	April	May	June	July	Year	April	May	June
Production and cow numbers:										
Total milk	Mil. lb.	11,354	10,631	11,178	10,851	10,534	121,928	10,609	11,175	10,982
Milk per cow	Lb.	1,304	980	1,033	1,004	974	11,240	987	1,040	1,023
Number of milk cows	Thou.	10,978	10,844	10,824	10,808	10,811	10,848	10,748	10,744	10,735
Prices received by farmers:										
All milk, sold to plants, 100 pounds	Dol.	9.37	10.10	10.10	10.00	10.10	10.58	11.60	11.50	11.50
Percentage of parity 1/	Pct.	.75	.74	.75	.76	.75	.75	.74	.74	.75
Manufacturing grade milk, 100 pounds	Dol.	8.62	9.30	9.26	9.24	9.28	9.65	10.70	10.80	10.70
Parity equivalent	Dol.	11.01	11.98	12.07	12.16	12.16	12.09	14.01	14.09	14.18
Fat content	Pct.	3.56	3.65	3.60	3.55	3.54	3.67	3.67	3.62	3.57
Minnesota-Wisconsin (3.5% fat), 100 pounds	Dol.	8.62	9.24	9.25	9.26	9.33	9.57	10.63	10.67	10.76
Milk eligible for fluid market, 100 pounds	Dol.	9.56	10.30	10.30	10.20	10.30	10.80	11.80	11.70	11.70
Price ratios and dairy ration values:										
Milk-feed 2/	Lb.	1.23	1.47	1.49	1.43	1.45	1.53	1.56	1.53	1.51
Manufacturing grade milk-hog	Lb.	.21	.21	.19	.19	.20	.21	.24	.25	.27
Manufacturing grade milk-beef cattle	Lb.	.24	.20	.18	.18	.18	.20	.15	.15	.16
Value of concentrate ration fed milk cows	Dol.	6.70	6.14	6.16	6.23	6.13	6.07	6.51	--	--
Farm cash receipts from dairy products	Mil. dol.	1,056	1,073	1,116	1,070	1,047	12,722	1,214	--	--
Production of factory products:										
Butter	Mil. lb.	103.2	97.2	97.6	85.1	71.4	994.3	92.4	98.6	--
American cheese, whole milk	Mil. lb.	212.1	189.6	208.7	208.0	179.6	2,074.2	192.0	210.6	--
Cheese, other than American	Mil. lb.	114.0	114.0	124.2	123.9	114.1	1,445.1	125.7	129.1	--
Canned milk, unskimmed	Mil. lb.	86.6	69.1	82.8	81.3	74.3	787.9	72.0	80.6	--
Dry whole milk	Mil. lb.	7.5	7.2	8.2	7.2	6.1	74.6	9.3	8.3	--
Frozen products 3/	Mil. gal.	108.2	95.6	110.6	127.6	120.1	1,170.4	97.2	108.6	--
Creamed cottage cheese	Mil. lb.	78.4	74.2	80.3	77.2	73.7	872.3	72.4	77.0	--
Total whole milk equivalent 4/	Mil. lb.	6,498	5,832	6,354	6,316	5,613	64,748	5,837	6,373	--
Nonfat dry milk, human use	Mil. lb.	119.9	94.7	103.6	114.9	97.2	920.4	87.8	104.8	--
Wholesale prices:										
Butter, Grade A, Chicago	Ct.	100.7	105.2	106.7	106.7	107.9	109.8	120.7	121.8	121.8
Cheese, American (40-pound blocks), f.o.b. Wisconsin assembling points, pound	Ct.	97.9	102.6	102.6	102.6	102.9	107.1	121.2	121.1	121.8
Evaporated milk, case	Dol.	15.25	16.09	16.29	16.26	16.26	16.20	17.49	17.70	17.89
Dry whole milk, pound	Ct.	79.8	86.4	86.6	87.1	88.1	89.8	98.4	98.8	--
Nonfat dry milk, pound	Ct.	67.9	70.5	71.1	71.0	71.3	71.4	78.8	79.4	--
Dairy products (BLS)	1967=100	174.2	184.5	184.5	185.4	186.1	188.4	207.0	207.9	208.3
Retail prices (BLS):										
Consumer price index 5/	1967=100	180.6	191.5	193.3	195.3	196.7	195.4	211.5	214.1	--
All food 5/	1967=100	191.7	207.5	210.3	213.8	215.0	211.4	232.3	234.3	--
All dairy products 5/	1967=100	173.1	181.6	183.5	184.8	185.3	185.6	202.4	203.8	--
Fluid milk and cream	12/77=100	--	102.7	103.7	104.6	104.8	104.8	114.0	114.7	--
Whole milk	1967=100	161.5	168.3	170.1	171.4	171.7	171.7	186.5	188.1	--
Other	12/77=100	--	102.3	103.2	104.2	104.5	104.5	114.1	114.3	--
Manufactured dairy products	12/77=100	--	102.6	103.7	104.3	104.7	105.0	114.9	115.8	--
Butter	1967=100	162.7	173.3	174.4	175.8	176.5	179.4	196.6	199.4	--
Cheese	12/77=100	--	102.5	103.2	104.0	104.4	104.8	115.5	116.3	--
Frozen desserts	12/77=100	--	102.1	104.7	104.9	104.8	104.7	114.3	115.2	--
Other	12/77=100	--	102.9	103.1	103.8	105.0	104.4	111.9	112.7	--
Margarine	1967=100	201.8	221.6	226.7	230.1	231.8	226.1	236.7	238.8	--
Stocks, end of month:										
Creamery butter	Mil. lb.	163.8	246.2	264.6	282.0	297.7	--	216.5	237.5	--
Cheese, total 6/	Mil. lb.	557.3	457.1	478.2	520.9	523.6	--	453.7	494.0	--
Canned milk, unskimmed	Mil. lb.	101.5	57.4	79.5	101.5	120.3	--	68.4	90.4	--
Dry whole milk	Mil. lb.	8.6	7.3	8.4	9.5	9.4	--	5.8	7.1	--
Total whole milk equivalent 7/	Mil. lb.	8,961	9,564	10,206	11,018	11,413	--	8,907	9,782	--
Nonfat dry milk	Mil. lb.	538.5	686.6	688.1	701.9	713.5	--	518.1	525.0	--
Commercial disappearance:										
Creamery butter	Mil. lb.	56.3	79.2	61.0	77.5	68.7	903.5	74.8	60.3	--
Cheese, American	Mil. lb.	156.2	169.3	185.1	164.3	174.4	2,064.7	177.1	173.0	--
Cheese, other than American	Mil. lb.	122.3	124.4	135.0	128.8	131.7	1,655.1	141.6	139.5	--
Canned milk, unskimmed	Mil. lb.	49.9	62.0	59.5	58.2	53.6	776.1	51.3	56.9	--
Milk in all products	Mil. lb.	9,603	9,916	10,006	10,062	10,305	119,972	9,972	9,850	--
Nonfat dry milk	Mil. lb.	45.6	37.6	44.3	53.3	51.4	658.4	33.3	34.1	--
USDA net removals:										
Butter	Mil. lb.	43.7	24.4	34.6	20.6	9/	112.0	13.6	26.8	8.8
Cheddar cheese	Mil. lb.	14.0	1.8	6.0	13.6	13.6	39.7	9/	1.7	2.2
Nonfat dry milk	Mil. lb.	62.8	27.6	51.5	54.0	46.3	285.0	21.3	44.8	50.0
Evaporated milk	Mil. lb.	1.6	1.9	1.3	1.1	1.9	17.6	1.9	1.7	1.1
Total whole milk equivalent	Mil. lb.	1,043	525	777	562	138	2,743	285	574	206
Fluid sales, change from year earlier: 8/										
Whole milk	Pct.	-3.1	-1.6	-2.5	-2.1	-2.4	-2.2	-3.4	-3.5	--
Low-fat and skim milk	Pct.	+7.7	+8.8	+6.0	+1.9	+3.0	+4.8	+2.6	+3.7	--
Total fluid milk	Pct.	+ .4	+2.0	+ .6	- .5	- .5	+ .2	-1.0	- .8	--
Cream and cream mixtures	Pct.	-1.9	-10.2	+1.8	-2.6	-2.9	-1.5	- .2	N.A.	--

1/ Seasonally adjusted prices as percentage of parity price.
2/ Different series than formerly published.
3/ Ice cream, ice milk, and sherbet.
4/ Includes manufactured products for which current monthly series are available.
5/ For all urban consumers starting January 1978.
6/ Natural, plus process American cheese held by CCC.
7/ Excludes cream and bulk condensed milk.
8/ Daily average sales in Federal and State Marketings areas.
9/ Less than 50,000 pounds.

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